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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,551	04/19/2004	Valery H. Vanstaan	14494	3439

7590 08/10/2006

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EXAMINER	
DURAND, PAUL R	

ART UNIT	PAPER NUMBER
3721	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/827,551	VANSTAAN ET AL.	
	Examiner	Art Unit	
	Paul Durand	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-15 and 17-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-15 and 17-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *4/19/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/30/2006 has been entered.

Claim Objections

2. Claim 19 is objected to because of the following informalities: on line 17, there is an erroneous period at the end of the limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,5-8,11,15,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich (US 5,115,944) in view of Colombo (US 5,632,421).

In claim 1, Nikolich discloses the invention as claimed including a fuel cell comprised of housing 12, having an open end enclosed by closure 20, valve stem 32,

having an outlet, disposed in operational relationship to the open end, which reciprocates from an open and retracted position to a closed extended position, a fuel metering valve 16, located within the housing and associated with the valve stem, a fuel metering chamber (generally defined by ribs 48), disposed in close proximity to the closure, which allows a pre measured amount of product through elements 58, the amount being dependant upon the time the valve is depressed, the housing having a separate fuel container 14 and the fuel metering valve having associated element 82, disposed within the second container, where the flow of the fluid outside the outlet is solely from the second container (see Figs. 1,4-6 and C3,L17 – C5,L21). What Nikolich does not disclose is the use of a metering chamber, which dispenses a predetermined amount of product when the valve stem is in the open position and the metering chamber being defined by two components, one of which has a seal engaging the valve stem.

However, Colombo teaches that it is old and well known in the art of pressurized dispensers to provide a pressurized container, comprised of metering valve 2, a metering chamber for dispensing a predetermined amount of product, which is comprised of first body 10, and second body in the form of gasket 14, which has a sealing portion, arranged on the inner diameter, which engages valve stem for the purpose of maintaining dispensing a predetermined amount of product (see Figs. 1,2 and C2,L54 – C3,L3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Nikolich with the

metering means and structure as taught by Colombo for the purpose of dispensing a predetermined amount of product.

In claim 5, Nikolich discloses the invention as claimed including clamp ring 82, associated with the valve body, which clamps the container.

In claim 6, Nikolich discloses the invention as claimed including the fuel metering valve having a main seal 34, with the radial valve stem projection 54 engaging the seal (see Fig. 4).

In claims 7 and 8, Nikolich discloses the invention as claimed including biasing element 36, located between the fuel metering chamber and a second end of the valve body for biasing the radial projection 54.

In claim 11, Nikolich discloses the invention as claimed including a valve stem that can be moved to a filling position, by retracting the stem further than the open position while maintaining a communication from the passage 58 and the container.

In claim 15, Nikolich discloses the invention as claimed including a fuel cell comprised of housing 12, having an open end enclosed by closure 20, valve stem 32, having an outlet, disposed in operational relationship to the open end, which reciprocates from an open and retracted position to a closed extended position, the housing having a separate fuel container 14, where the flow of the fluid outside the outlet is solely from the second container and a fuel metering chamber (generally defined by ribs 48), disposed in close proximity to the closure, which allows a pre measured amount of product through elements 58, the amount being dependant upon the time the valve is depressed (see Figs. 1,4-6 and C3,L17 – C5,L21). What Nikolich

does not disclose is the use of a metering chamber, having a main seal which forms part of a chamber wall and which dispenses a predetermined amount of product when the valve stem is in the open position.

However, Colombo teaches that it is old and well known in the art of pressurized dispensers to provide a pressurized container, comprised of metering valve 2, a metering chamber for dispensing a predetermined amount of product, which is comprised of a main seal 12, which forms the top wall of a metering chamber (see Figs. 1,2 and C2,L54 – C3,L3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Nikolich with the metering means and structure as taught by Colombo for the purpose of dispensing a predetermined amount of product without any of the contents leaking out.

In regard to claims 19 and 20, Nikolich discloses the invention as claimed including a fuel cell, to be used in a combustion tool (C1,L17-25), comprised of housing 12, having an open end enclosed by closure 20, valve stem 32, having an outlet, disposed in operational relationship to the open end, which reciprocates from an open and retracted position to a closed extended position, the housing having a separate fuel container 14, and the fuel metering valve having associated element 82, disposed within the second container, where the flow of the fluid outside the outlet is solely from the second container and a fuel metering valve 16, located within the housing and associated with the valve stem, a fuel metering chamber (generally defined by ribs 48), disposed in close proximity to the closure, which allows a pre measured amount of

product through elements 58 (see Figs. 1,4-6 and C3,L17 – C5,L21). What Nikolich does not disclose is the use of a metering chamber, having a main seal which forms part of a chamber wall and which dispenses a predetermined amount of product when the valve stem is in the open position.

However, Colombo teaches that it is old and well known in the art of pressurized dispensers to provide a pressurized container, comprised of metering valve 2, a metering chamber for dispensing a predetermined amount of product, which is comprised of a main seal 12, which forms the top wall of a metering chamber (see Figs. 1,2 and C2,L54 – C3,L3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Nikolich with the metering means and structure as taught by Colombo for the purpose of dispensing a predetermined amount of product without any of the contents leaking out.

5. Claims 2,9,10,12,13,14,17,18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich and Colombo in view of Tsutsui (US 6,202,900).

In claims 2,9 and 10, the modified invention of Nikolich discloses the invention as claimed as applied to claim 1 above, including valve stem 32. What Nikolich does not disclose is the use of radially enlarged portion, which interacts with a lip seal. However, Tsutsui teaches that it is old and well know in the art to provide a pressurized container 11, with valve stem 13, having a radially enlarged portion (defined below 26, in Fig. 1), which engages a lip seal 18, when the stem is in an open position, and defines a fuel passage when the stem is in a closed position and a fuel chamber 21, surrounding the

valve stem, the chamber having a first end with main seal 19, engaging the reciprocating stem in a wiping manner (see entire document).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the modified invention of Nikolich with the valve stem and lip seal means as taught by Tsutsui for the purpose of dispensing a fluid from a container.

In claims 12-14,17 and 21, the modified invention of Nikolich discloses the invention as claimed, as applied to claims 1 and 11 above, except for specific positioning arrangement of the valve in the various positions. However, Tsutsui teaches that it is old and well know in the art to provide a pressurized container 11, with valve stem 13 that changes position relative to the metering chamber in an open, closed and filling position, the stem having a radially enlarged portion (defined below 26, in Fig. 1), which engages a lip seal 18, when the stem is in an open position, and defines a fuel passage when the stem is in a closed and filling position, the valve body having a slot at the second end, formed between the stem and the seal 18 to communicate with the container during filling and the metering chamber dispensing a measured amount of fuel (see Figs. 1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Nikolich with the valve stem and chamber means as taught by Tsutsui for the purpose of dispensing and refilling fluid from a container.

In claim 18, while the modified invention of Nikolich, through Tsutsui discloses the use of an annular slot arranged on the valve body for refilling, it does not disclose the use of a plurality of slots for refilling. However, the examiner asserts that it would have been an obvious matter of design choice to choose a plurality of slots as opposed to a single slot, since applicant has not disclosed that using a plurality of slots solves any stated problem or is for any particular purpose and it appears the invention would do equally well with the single slot as taught by Tsutsui.

Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Durand
August 7, 2006

Stephen F. Gerrity
Primary Examiner